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A NATIONAL PROGRAM IN EARLY EDUCATION.

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THIS PROJECT WAS PRIMARILY CONCERNED WITH DEVELOPING A CONCEPTUAL FRAMEWORK FOR THE ESTABLISHMENT OF A NATIONAL PROGRAM IN EARLY CHILDHOOD EDUCATION. A SECOND OBJECTIVE WAS TO TRANSLATE THE THEORETICAL RATIONALE INTO AN OPERATIONAL PROGRAM INVOLVING THE COLLABORATION OF A NUMBER OF POTENTIAL CENTERS INTO A PROGRAM OF RESEARCH, TRAINING, AND CURRICULUM AND PROGRAM DEVELOPMENT, WITH PRIMARY EMPHASIS ON CHILDREN UP TO PRIMARY SCHOOL AGE. TO ACHIEVE THIS END, VARIOUS MEETINGS WERE HELD. THE SINGLE MOST COMPLEX PROBLEM THAT AROSE DURING THESE MEETINGS WAS THE ESTABLISHMENT OF AN ACCEPTABLE AND WORKABLE ADMINISTRATIVE STRUCTURE. ONE TENTATIVE ADMINISTRATIVE STRUCTURE, HOWEVER, DID RECEIVE SERIOUS CONSIDERATION AND WAS GRAPHICALLY SHOWN IN THE REPORT. APPENDED TO THE REPORT WAS A DRAFT PROPOSAL FOR ESTABLISHING A NATIONAL LABORATORY IN EARLY EDUCATION. (GD)

U.S. DEPARTMENT OF HEALTH, EDUCATION AND WELFARE  
Office of Education

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**FINAL REPORT**  
**Project No. 6-2937**  
**Grant No. 3-6-062937-1874**

**A NATIONAL PROGRAM IN EARLY EDUCATION**

November 14, 1966

**U.S. DEPARTMENT OF  
HEALTH, EDUCATION, AND WELFARE**

**Office of Education  
Bureau of Research**

**A National Program in Early Education**

**Project No. 6-2937  
Grant No. 3-6-062937-1874**

**William J. Meyer**

**November 11, 1966**

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**The Institute for the Development  
of Educational Activities**

**Dayton, Ohio**

## INTRODUCTION

For the past few years, there has been a rapidly growing interest in the education of young children. The research of Gray and Klaus (1965), and the theoretical analyses of Hunt (1961), point to the extraordinary potential of early education, and, indeed, the importance of early stimulation in assuring adequate development. Recent technological advances have generated social pressures, and these pressures, along with growing demands of the socially disadvantaged, have led to the realization that our present educational system should be supplemented by carefully developed early intervention programs. The enormous increase in the number of children enrolled in preschool programs has sharpened the need for assessment of these programs and adaptation of traditional educational institutions to this new development.

At present, however, although more and more people are responding to the notion that training at the early childhood level (ages 2 to 7) is desirable, there is very little agreement on the specific kinds of intervention needed for various groups of young learners. This lack of consensus reflects the fact that there is no basic theory of child-rearing, or of teaching per se. Moreover, there is a dearth of the kind of research that provides answers to fundamental educational questions pertaining to the young.

The pressing need for research and development in early education--from very basic theoretical research to the development and evaluation of teaching programs--is not now being adequately met. Of course, several of the Research and Development Centers funded by the U.S. Office of Education, certain of the proposed regional laboratories (as well as many individual projects), and the Office of Economic Opportunity have mounted large-scale effort in the field. However, a nation-wide, carefully planned and coordinated program of research and development is called for if the varied and mammoth problems are to be resolved satisfactorily soon.

The increased demands for early childhood education programs has severely taxed both the physical and professional resources of the nation. As more preschool programs emerge a greater proportion of teachers will necessarily be untrained. There will be similar demands for social workers, administrators, and other personnel involved in preschool education.

Because of the magnitude of the need, the U.S. Office of Education requested advice; specifically, exploration of the

possibilities of establishing a nation-wide system of centers focused on early childhood education. This suggestion was based on the following assumptions: (1) the needs of the field are such that they can be met only by a large-scale across-the-board attack; (2) the needs cannot be met by a single institution or a single region; (3) the structure of a nationally focused program would permit universities and other institutions to continue to operate with a high degree of independence and yet would ensure minimum duplication and maximum coordination of effort; (4) the program, as authorized by the Cooperative Research Act (P.L.83-531) and amended by Title IV of the Elementary and Secondary Education Act of 1965 (P.L. 89-10), provides an adequate means to plan and to fund on a long-term basis.

As an outgrowth of this request a meeting was held in Los Angeles on December 9 and 10, 1965 to consider the desirability, feasibility and possible organization of a nation-wide system of laboratories focused on the education of young children. The following people, serving as the basic planning group, were present:

Dr. John Goodlad, UCLA (Chairman)  
Dr. Susan Gray, George Peabody University  
Dr. Robert Hess, University of Chicago  
Dr. Marie Hughes, University of Arizona  
Dr. Harry Levin, Cornell University  
Dr. Ralph Tyler, Center for Advanced Studies  
Dr. Joseph Margolin and  
Dr. Joanna Williams represented the Office of Education

A second meeting was held on January 15 and 16 in New Orleans. In addition to the people listed above, the following people attended as consultants. They represented certain of the currently most visible research centers in the field:

Dr. Alfred Baldwin, New York University  
Dr. Clara Baldwin, New York University  
Dr. Martin Deutsch, New York Medical College  
Dr. Richard Ellis, New York Medical College  
Dr. John Harding, Cornell University  
Dr. Samuel Kirk, University of Illinois  
Dr. Shirley Moore, University of Minnesota  
Dr. Pauline Sears, Stanford University  
Dr. Sheldon White, Harvard University

A third meeting was held on February 19 and 20 in Chicago, attended by the members of the original panel and seven others,



who represented different regions of the country. They were invited with the idea that they might possibly assume the leadership for assembling the resources in their region for the Program. These were:

Dr. Mary B. Coleman, University of Pennsylvania  
Dr. Louis Levine, San Francisco State College  
Dr. William Menge, Wayne State University  
Dr. William Meyer, Syracuse University  
Dr. Shirley Moore, University of Minnesota  
Miss June Patterson, UCLA  
Dr. Burton White, Harvard University

On the basis of these meetings, the planning committee formulated the following generalized conceptual model for a proposed National Program in Early Education.

#### Major Purpose and Focus of the Program

The major purpose is to organize and develop a multi-disciplinary and multi-functional nation-wide system of laboratories and institutes focused on early childhood education. The primary emphasis is to be on children up to primary school age. Two major arguments for this position are advanced. First, because the established public school system does not concern itself with this age group, there are few traditions and, consequently, unique opportunities to explore new paths. Second, many of the educational needs of older children will be taken care of through other programs now being funded and launched, whereas there is now little prospect of a broad, research-based attack on the educational problems of the very young. The system of laboratories proposed here should concern itself, of course, with some studies and programs extending into the primary school years, for the problems of transition and articulation between preschool training and the established educational patterns of the public school system are major ones.

#### Range of Emphases

The laboratory will conduct research, development, and training of early childhood education specialists. Diversity of programs is especially essential in a focused program of national scope, for the several constituent Centers may have quite different interests and needs. A nationally-coordinated

system such as the one proposed here can address itself nicely to certain general issues that have aroused a great deal of concern: (1) The long lag between research and its utilization, with the consequence that decision-making in education does not involve adequate consideration of research findings; (2) the lack of adequate communication among researchers, often leading to duplication of effort and relatively few cumulative effects; (3) the lack of communication among research laboratories, educational institutions, and the community as a whole.

For the above reasons, the strength of the laboratory network shall depend on the development and maintenance of the following activities: (1) Research on the learning processes of young children and the effectiveness of various teaching procedures; (2) the experimental development, trial and replication of educational programs; (3) the study of improved preparation of teachers for young children; (4) the study and improvement of procedures for preparing research workers and leadership personnel; (5) the dissemination of research findings and results of tested teaching procedures, and the maintenance of effective communication among researchers and practitioners (including the organization of consultation services to assist schools in implementing educational improvements developed through research).

#### Tentative Organization of the Program

Prior to June 1, 1966, the organizational structure had not yet been established precisely. The following tentative procedures had been specified:

A Central Agency will provide the coordination for the network. This agency will: (1) coordinate the research program; establish and operate a program clearing house for information storage and retrieval; and (3) establish a data bank.

The director of each of the several component Centers would serve on a Steering Committee, with the responsibility for formulating plans for the research, training, and development activities of the Program. This group will serve as the scientific planning panel which will make continuing recommendations concerning the activities of the system. The membership of this group might expand to include other experts in the field of early childhood.

The Director of the National Coordinating Center would assume responsibility for all the service functions of the agency, report on the work of the Program, and make recommendations as to its further activities to a Board of Directors (policy and planning group). This Board will engage in continuing review of the Program and make recommendations directly to the Office of Education.

As a result of the several meetings involving the original Planning Committee and representatives from institutions expressing interest in the National Program, a conceptualization of the Program, as well as several specific operational guidelines, began to emerge. At this time the original Planning Committee felt that funds were needed for the period June 1 - September 15, 1966 to conduct the necessary planning for the establishment and full initiation of the Program. The objectives, as stated in the initial proposal, were as follows:

1. Prepare a final, detailed proposal regarding the work and organization of the Program. This includes coordinating all proposals submitted by the component Centers and integrating them into a cohesive unit. This document will include a discussion of the specific substantive areas on which the Program will concentrate, and a description of how this Program will relate to other federal programs in early childhood education;
- (2) identification of a Director for the National Program, who will assume duties and responsibilities as soon as possible;
- (3) planning and conducting additional meetings of the original Planning Committee for the purpose of reviewing the several components of the proposal; (4) planning and conducting a meeting in July comprised of the Planning Committee, representatives from interested universities and colleges, and representatives from the United States Office of Education. This meeting was tentatively set for three days between July 3 and 10.

Dr. William J. Mayer of Syracuse University was asked by Dr. John Goodlad, on behalf of the original Planning Committee, to assume the position of Executive Secretary with the responsibility for implementing the objectives of the proposal. Dr. Mayer accepted the invitation and met with Dr. John Goodlad in Chicago, Illinois, on March 23, 1966, to discuss the objectives and prior planning for the National Center. The remainder of this report will describe Dr. Mayer's activities in connection with Project No. 6-2937.



### Coordination of Center Proposals

Shortly after June 1, 1966, the Executive Secretary received copies of nine proposals for regional centers from the following institutions: Cornell University, University of Chicago, Wayne State University, Syracuse University, University of Minnesota, University of Arizona, San Francisco State College, University of California at Los Angeles and George Peabody University. Two additional proposals were received from Harvard University and the University of Pennsylvania, but these were mostly statements of intent. These documents were examined for the following purposes:

1. To obtain a general impression of the proposed budgets necessary for each Center. This information was collated and a Summary Statement prepared.

2. The proposals were examined to determine overlapping of activities among the proposed Centers. This analysis permitted an estimation of which Centers might profitably, and readily, collaborate in their efforts by interchanging data and providing subjects for meaningful replication of experiments. At this point in the development of the National Program, it was not generally known among the eleven institutions submitting proposals that intercenter collaboration would play a key role in the National Laboratory. The Executive Secretary felt that it was important that this information be communicated and he further felt that his office should provide suggestions to each of the Centers as to where they would most likely find activities at other Centers related to their own.

3. Each proposal was examined to determine the scope of activities proposed for the Center. Again, at this time, it was not generally known that each Center was expected to include at least two of the following three activities: research, training, and curriculum and program development. The Executive Secretary and his staff attempted to evaluate the potential strength of each of the nine institutions in terms of where they might profitably focus their efforts.

4. Finally, each proposal was examined in terms of organization, degree to which research and other activities were described in detail, the degree to which the research and other activities were consistent with the objectives of the National Program, and finally in terms of specific issues raised in each of the proposals.

Concurrent with these activities, the Executive Secretary began outlining the statement of the concept and objectives of the National Program (See next Section).

In view of the extreme time pressures, and other considerations, the original Planning Committee felt that communications with the institutions that had expressed interest in the National Program had been poor. It was their recommendation that the Executive Secretary visit with each of these institutions in person at which time he would describe present plans, his role in the National Program, and his thinking about the objectives of the National Program. At the same time, it was felt that his reactions to the individual proposals could be given with whatever recommendations were to be made. Thus, with the exception of George Peabody University, Harvard University, and the University of Pennsylvania, all of the interested institutions were visited. In general, the results of these meetings were highly productive and the notion of intercenter collaboration was well accepted. It should also be noted that on the basis of these meetings, two institutions decided that they were not yet ready to submit a formal proposal for funding. Sometime after the completion of these visits, the Executive Secretary was made aware of the interest of New York University in becoming part of the National Program. He received a proposal from this institution which was evaluated in exactly the same terms as those from the other institutions. Since it was too late for him to make a personal visit, he did initiate a rather lengthy phone call describing the objectives of the National Program and making recommendations as to modifications in their proposal.

Shortly after the deadline of June 20 for submitting proposals, all those interested in the National Program received an invitation for a General Meeting at the Office of Education on July 9 and 10, 1966. The results of that meeting are described in a subsequent Section.

#### The National Program in Early Childhood Education

During the month of June, the Executive Secretary prepared a document describing the theoretical and conceptual rationale for the establishment of a National Program in Early Childhood Education. This document further describes the objectives of

the National Program as well as recommendations for operationally realizing the proposed objectives. (The proposal submitted to the United States Office of Education for approval is attached to this Final Report as Appendix A). A rough draft was developed and submitted to the original Planning Committee as well as those individuals representing the institutions that had submitted proposals for a Center. At the July 9 and 10 meetings in Washington, D.C., this statement was evaluated by the entire group present. Recommendations for modifications were noted and incorporated in the final document. This document now stands as a statement of the commitment of the National Program as well as the commitment of each of the Centers constituting the entire National Program. Institutions interested in becoming part of the National Program should be familiar with this document prior to preparing a proposal (copies can be secured from the Bureau of Research, the United States Office of Education, Washington, D.C.).

#### The July 9 - 10, 1966 Meeting

The following individuals along with their institutional representation were present at the meeting in Washington: Robert Bass, University of Chicago; William J. Meyer, Syracuse University; Mary Ford, Cornell University; Leon Goldstein, New York University; Marie Hughes, University of Arizona; Louis Levine, San Francisco State College; Shirley Moore, University of Minnesota; Burton White, Harvard University; Robert Kindred, University of California at Los Angeles; Joanna Williams, University of Pennsylvania; James Miller, George Peabody University; Joan Schwartz, U.S. Office of Education; Virginia Rainey, Office of Economic Opportunity; Howard Hjelm, U.S. Office of Education; Harry Levin, Cornell University; John Goodlad, University of California at Los Angeles. The initial session was chaired by Harry Levin until the arrival of John Goodlad, who then assumed the role of Chairman for the meeting.

The purpose of the meeting was to define in more specific terms the concept of intercenter collaboration and to further explore the administrative organization of the National Center.

A considerable amount of time was spent in having representatives from each of the institutions describe their main activities and interests. Although no commitments were made, it became clear from these presentations that ready collaboration was possible among several of the possible Centers. It was not feasible, of course, to make any firm commitments during this meeting since no final action had been taken by the U.S. Office of Education with respect to funding any of the Centers. It

was felt that as soon as those decisions had been made, the Director of the National Center would immediately bring together the Directors of the approved Centers for a more detailed exploration and possible commitment of specific intercenter collaborative activities.

The second major point of discussion centered on the activities of the National Center and the administrative relationship of the National Center to each of the proposed Research and Development Centers. There was general agreement that one of the primary activities of the National Center would be that of dissemination of research findings as well as the outcomes of program development activities. The possibility of establishing data banks and using such retrieval systems as ERIC were suggested. The National Center would also, in collaboration with an appointed Advisory Council, make decisions concerning future directions of the National Program. This would be accomplished by funding new Centers, developing other sources of funds, such as private foundations, and by phasing out of existing Centers. There was some feeling expressed during the meeting that the National Center should have a research capability of its own.

Toward the end of the meeting Dr. Hjelm re-emphasized the fact that each of the Centers would be treated individually in terms of funding. He explained that every Center would be site visited by a group of individuals designated by his office and that each Center would be reviewed as an individual entity.

Subsequent to the General Meeting, a meeting of the Executive Committee comprised of the original Planning Committee convened for a period of three hours on July 10. The sole purpose of this meeting was to make more specific the administrative organization of the National Program in Early Childhood Education. The administrative structure receiving the most serious consideration is graphically shown in Figure 1.



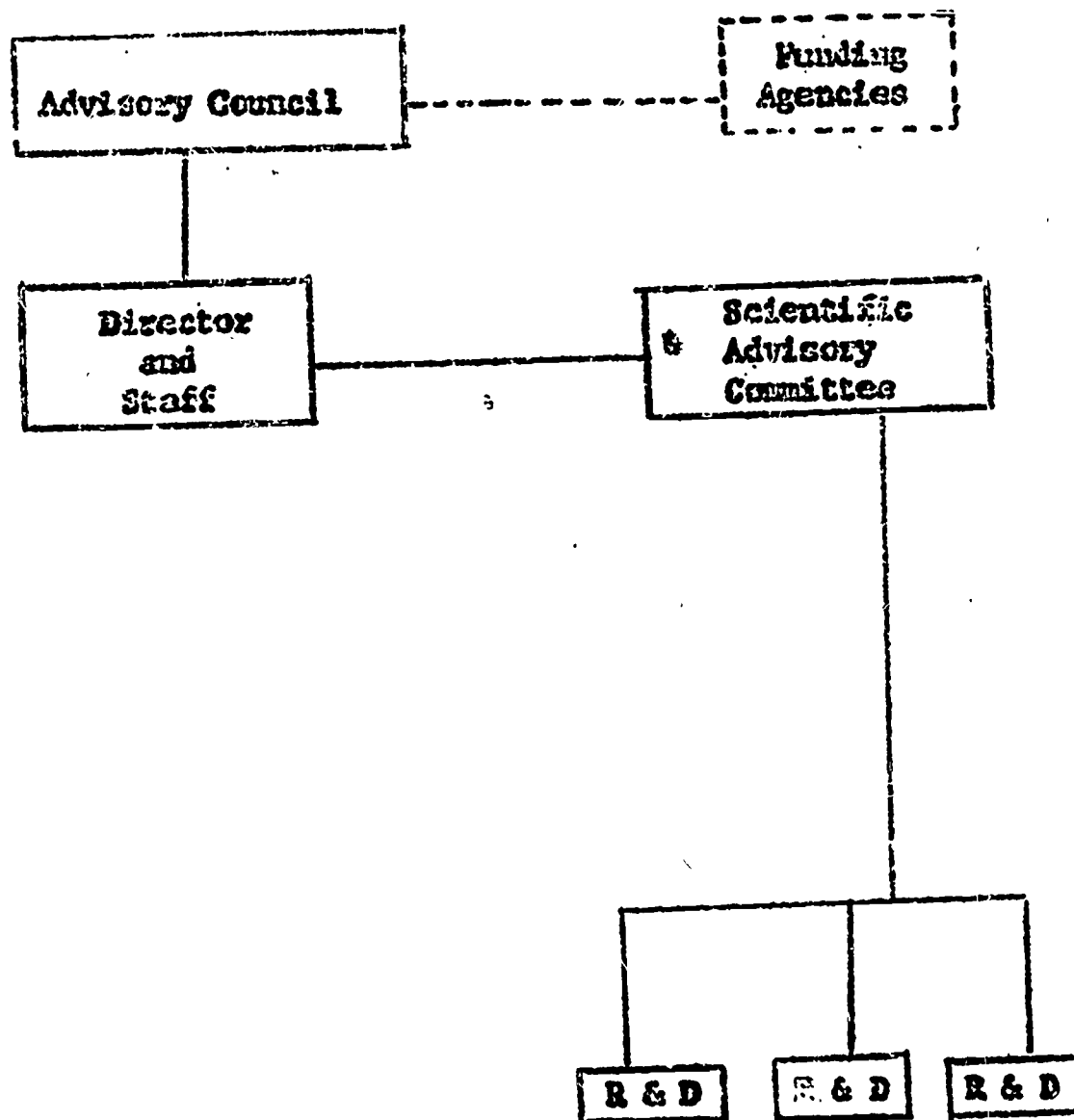


Figure 1 - Proposed administrative structure for National Program in Early Childhood Education.

The Committee felt that the first step in establishing the National Program should be the appointment of an Advisory Council. There was general agreement that the Advisory Council should consist of no more than twelve people, with three individuals from each of the following areas: the social sciences, preschool education, and in general terms, the business world. The Advisory Council would serve, in effect, as a Board of Directors to a non-profit organization which would be legally established in one of the fifty states. The Advisory Council would attempt to provide direction to the National Program and would serve as a sounding board for recommendations from the Director of the National Center. The Committee provided the names of several individuals from each of the proposed areas who might be considered for appointment. Although the establishment of a non-profit organization was generally agreed upon by the Committee, it was also pointed out by Dr. Howard Njelm that other non-profit institutions, such as a university or research organization, might also be suitable for housing the National Center.

The Director of the National Center would have direct responsibility to the Advisory Council and would function in collaboration with the Steering Committee. The Director would be appointed by the funding agency in collaboration with the Advisory Council. In addition to developing a program of information retrieval and dissemination, as well as administering the activities of the Centers, especially inter-center collaborative efforts, the Director would have responsibility for recommending funding and continuation of funding to the Advisory Council. It was made explicitly clear, however, that all decisions concerning future funding and continued support of ongoing Centers would be made by the primary funding agency; namely, the United States Office of Education.

The Steering Committee would provide the Director with direction for the future development of the National Laboratory. The Steering Committee would also be in a position to respond to recommendations from the Advisory Council and/or the Director.

Activities Subsequent to the July 9 - 10, 1966 Meeting

At the termination of the July meeting at the United States Office of Education, each of the representatives from interested institutions were advised to make final revisions in their proposals and submit 30 copies of them directly to the United States Office of Education by July 20, 1966. The Executive Secretary was instructed to revise his statement for the National Laboratory and submit 100 copies of it to the United States Office of Education by July 20, 1966. The designed revisions were made and the revised statement was received in Washington on the designated date.

During the remainder of the month of July and throughout the month of August, the Executive Secretary served as a focal point for receiving and disseminating information concerning the National Program. He was in frequent communication with representatives from the United States Office of Education especially in terms of decisions concerning the appointment of a Director of the National Center and with other organizational matters. Each member of the original Planning Committee was consistently informed of events as they transpired and their reactions, in turn, were reflected in recommendations made to the United States Office of Education. For some four weeks prior to the termination of this project, the Executive Secretary met with five of the members of the Planning Committee at places and times convenient to them. The sole intent of these meetings was to explore in detail the modifications for compromises that each person would be willing to make in order to expedite the formation of the Advisory Council and the appointment of a Director of the National Center. One clear outcome of these meetings was the feeling that the Planning

Committee needed to reconvene at the United States Office of Education to discuss various alternatives and strategies in the establishment of the National Program. This meeting was held after the termination of this grant.

#### Summary and Conclusions

This project was primarily concerned with developing a theoretical rationale for the establishment of a National Program in Early Childhood Education. A second objective was to translate this theoretical rationale into an operational program involving the collaboration of a number of potential Centers into a meaningful and viable program of research, training, and curriculum and program development. Perhaps the single most complex problem that arose during the tenure of this project is the establishment of an acceptable and workable administrative structure. Clearly, this is the first time that a group of social scientists have attempted to coordinate their resources and efforts into a broad collaborative attack on a major problem. Although, there was evidence during many of the meetings, and during private conversations, of concern about the collaborative nature of the National Program, the majority of this scientific group felt challenged and committed to the concept of a collaborative effort. If the success of many collaborative efforts of scientists in other fields such as physics, astronomy, and atomic energy are indicative of the high level of sophistication and maturity of those groups, then it might be reasonably argued that the social scientists involved in the National Program in Early Childhood Education are on the threshold of achieving a similar level of sophistication and maturity. As the National Center and each of the Research and Development Centers become operational, it will be of great interest, and perhaps of great value, to carefully monitor the outcome of the total collaborative effort.



## APPENDIX A

A LABORATORY FOR RESEARCH  
AND DEVELOPMENT IN EARLY  
CHILDHOOD EDUCATION

Submitted to the U. S. Commissioner of Education  
Under the Provisions of Public Law 89-10, Title IV

Project Title  
National Program in Early Education

Submitted by

Initiated by  
William J. Meyer  
for the Planning Committee

Officially Approved by:

Signed for the Committee by

Date Transmitted

# NATIONAL LABORATORY FOR RESEARCH AND DEVELOPMENT

## IN EARLY CHILDHOOD EDUCATION

### FOREWORD

This document proposes the establishment of a National Laboratory in Early Childhood Education under Title 4 of Public Law 89-10. Initially this laboratory will be comprised of a number of Centers with a history of excellence in the areas of Child Development and Early Childhood Education. These centers are distributed throughout the entire United States and represent a broad variety of viewpoints and approaches to early childhood education. The major objective of the National Laboratory is the strengthening of early childhood education programs by augmenting basic knowledge of early childhood behavior by the development and implementation of intervention procedures consistent with basic processes, and by the dissemination of these findings in terms of training teachers and researchers. An assumption fundamental to the development of the proposed National Laboratory is that these objectives are best achieved through the mutual co-operation and integration of individual Centers.

## SPECIFIC AIMS AND OBJECTIVES

Early childhood Education has a history of uneven growth and development. Prior to the 1930s, pre-school education was limited to a relative minority of children in the United States. In the 1930s, largely because of the depression, there developed a strong interest in pre-school education derived from the practical necessity of providing day-care service for working mothers. These centers were funded almost entirely by federal and state funds. For the most part, these day-care centers functioned largely as baby-sitting services. There were, of course, many exceptions to this pattern, the most notable being at the University of Minnesota and the State University of Iowa. During this period of time, these institutions, among others, developed important research programs which generated a large amount of important data and which were instrumental in the development of many pre-school practices still being used today. It was during this period of time that a major controversy developed with respect to the relative contribution of heredity as opposed to environment in the determination of children's behavior. This controversy could never really be settled, but it did raise some questions about the long range effectiveness of nursery school education. Subsequent research studies revealed that after at least two years, differences among nursery school and non-nursery school children tended to disappear. Findings of this kind, coupled with the then generally accepted view, that the course of human development was largely determined by genetic variables, led to a decline of interest in the general early childhood education field.

During the years following the second world war, interest focused primarily on elementary and secondary education problems, and there also began to



emerge a strong interest in experimental approaches to the study of children. There was, in fact, a decided shift away from traditional research strategies and traditional formulations, and a more sophisticated empirical approach to the study of children became apparent. Shortly after this period, and perhaps as a result of new conceptualizations about human development, there emerged a great concern for those segments of our society that were rapidly falling behind economically. When society demanded that this situation be changed, it became clear that our supply of personnel trained in early childhood education could not approach the demand. It was also clear that our understanding of the basic processes and behaviors of young children were inadequate and that, therefore, many aspects of Early Childhood Education Programs were not well understood.

This very brief historical survey of early childhood education in the United States is intended to serve as a basis for the development of a broad conceptual framework around which the National Laboratory for Research and Development in Early Childhood Education can be described. A closer inspection of the early theories and methods employed in the study of young children indicates that, in large measure, they were derived from an acceptance of the basic principles of evolution as originally defined by Darwin (1859). These principles imply that the course of human development and the emergence of specific behaviors are genetically pre-determined; that is, behaviors unfold in a pre-determined manner relatively independent of environmental stimulation. Concepts such as maturation and readiness assumed a central position in these models and the main task of the scientist became the description of the chronological ages, or the mental ages, at which behaviors for the "normal" child emerged. Differences in behavioral capa-

bilities between two or more age groups were either explicitly or implicitly interpreted as the result of differences in chronological age. Variations from the mean were usually interpreted as the result of superior endowment in the case of accelerated development, or as inferior endowment in the case of retarded development. Chronological age norms, for example, were developed for a variety of behaviors on the assumption that either environment was irrelevant to the development of the behaviors or that the environments of all children were exactly equivalent. In effect the genetic model permitted the educator to view classroom failures as the result of inferior genetic endowment,-- thus generating what may be described as a passive view of the educational process. It should also be noted that this theoretical conceptualization was partially responsible for the search for a best method of changing children's behavior as exemplified in the traditional "methods" kind of experimentation.

Recent theoretical and empirical relationships indicate that environmental variables and biological predispositions interact to produce human beings with more or less unique patterns of capabilities and behavioral repertoires. There are now data available, derived mostly from experimentation with laboratory animals, indicating that specifically delineated environmental stimuli, in fact, not only modify overt behavioral capabilities, but also modify structure, as measured in terms of changes in brain weight. This formulation views such traditional variables as socio-economic level, race, sex, and chronological age as a set of convenient descriptive terms containing little or no explanatory value. The mere passage of time without environmental stimulation would, from this viewpoint, produce a truly atypical organism (an inference supported by experimentation with animals). Socio-

economic level is seen as describing an income level or a general environmental circumstance but where it is crucial that the variables (stimulus components impinging on the organism) are specified. The strategy of the scientist in this theoretical framework is, therefore, the systematic examination of the variables influencing the course of development, with particular attention given to unique or individual patterns of behavior.

Educationally, this theoretical framework suggests that it is a fruitless task to search for an ultimate method of teaching children, regardless of the specific content area. In effect, this model provides a basis for the concept of individualized instruction and generates an active concept of education where a child's inadequate performance is viewed as a failure of society, in the broadest context, and of the educational program in the more specific context. The ultimate objective focuses on the development of numerous alternative techniques that capitalize on the specific individual pattern of capabilities. It is certain that technological advances in educational programs will contribute to the development of new methods of teaching, but such advances may be pre-mature because of our basic lack of understanding of fundamental processes.

The interaction viewpoint also provides a theoretical basis for the current activities pertaining to the preschool education of culturally-deprived children. For example, the old question of heredity versus environment is no longer appropriate because the relative contribution of each cannot be determined. This question now becomes one of how best to develop intervention procedures that are consistent with genetic structures. In view of the fact that, for the most part, intervention procedures are not introduced prior to age two, the question is really one of how best to

define intervention procedures for children presenting specific behavioral patterns resulting from the interaction of heredity and environment. The assumption that all children are drawn from essentially the same gene pool but differ only in terms of environmental stimulation is not consistent with the interaction view. This assumption is implied, however, whenever an investigator provides culturally-disadvantaged children with experiences common to the middle-class child and presents these experiences in the same way as he would to the middle-class child. The alternative strategy is to determine the behavioral capabilities of culturally-disadvantaged children and then develop intervention procedures which are consistent with these capabilities.

The major objectives of the proposed National Laboratory in Early Education may now be stated in the context of an "active" view of the educational process.

1. The National Laboratory in Early Childhood Education is committed to an intensive examination of pre-school children in a broad variety of areas including their cognitive, social, and emotional development. The milieu, including neighborhood and family, within which development occurs is regarded as an integral part of development and their influence will also be intensively examined. This intensive research program will not only focus on the behavioral capabilities of the children, but will also attempt the further understanding of underlying processes by the systematic manipulation of antecedent variables. Empirical relationships that emerge which have broad theoretical and/or applied significance will be replicated using samples of children with unique attributes.

2. The National Laboratory in Early Childhood Education will focus on



the development of new teaching methods, curricula, and materials which will foster the development of individual children. These pre-school programs will be developed in conformity with the output of the basic research program as it contributes to the understanding of fundamental processes. These programs will be systematically evaluated by each center to determine the degree to which changes in the children's behavior are consistent with intended objectives. As new knowledge is acquired, it is anticipated that techniques and methods for changing behavior will be modified. Since the Laboratory includes centers with diverse theoretical views and objectives, it is a reasonable expectation that several different programs of early childhood education will emerge. These diverse programs will provide the knowledge necessary for influencing children's behavior in accordance with specific objectives. Thus the Laboratory will provide a compendium of objectives and implementation procedures which will be useful to those wishing to develop new early childhood education programs. Stated somewhat differently, the intent of nurturing diverse programs within the National Laboratory is not for comparison purposes, but rather, to determine how to best implement a specified set of objectives.

3. The National Laboratory in pre-school education will provide the resources for increasing the number of well trained teachers and research workers that are now in such short supply. The purpose of the training programs, as in the case of program development, is to support diverse approaches to training programs with respect to specific objectives, planned experiences, professional identifications, and competencies. Attention will focus primarily on the talents and capabilities generated by specific training programs with the explicit recognition that each

program will have its own unique strengths as well as weaknesses. It is conceivable, for example, that one Center will produce professional workers who are especially competent in dealing with parents but who are less strong in developing academically oriented pre-school programs. The reverse pattern will exist at another Center. The National Laboratory will provide descriptions of training programs, including objectives and procedures, which will provide a basis for establishing new programs. All Centers will produce stronger professional workers because of the substantial resources provided by the National Laboratory.

4. The National Laboratory for Early Education will provide a basis for the development of a meaningful theory of child development. At the present time there are several fragmented, narrowly conceived theoretical systems that might best be labeled miniature theories. Perhaps the one exception to this statement is the general model developed by Jean Piaget. But here too there exist certain important theoretical gaps, such as a specification of the transition rules from stage to stage, which need to be closed. There are two ways in which the National Laboratory is likely to contribute to theory development: 1. through the support and encouragement of research which will better define fundamental processes and specify crucial variables, and 2. by bringing together, within the National Laboratory, divergent viewpoints.

5. The National Laboratory for Early Education will have as its primary objective the understanding of all children and the development of knowledge which will significantly improve early childhood education programs. This objective is assured by the fact that the network of Centers represents a diversity of philosophies and approaches in terms of research, training,

program development, and experiential backgrounds of the children within the National Laboratory. These diverse groups of children will permit a systematic evaluation of the outcomes of the various research, training, and program development activities. By integrating activities it will be possible to specify, with greater precision than has heretofore been possible, the variables that directly influence children's behavior. In this context, then, the National Laboratory will provide the framework for the development of the broadest possible principles of child development, and will, furthermore, provide a basis for determining how specific variations in environmental circumstances influence the basic principles.

6. The National Laboratory will provide the administrative structure for encouraging communication among the scientists, trainees of teachers, and curriculum planners associated with each Center. In this way, the Laboratory will enhance the dissemination of new information and substantially reduce the lag between scientific discovery, program implementation, and the training of new professional workers aware of current trends

**COMMITMENTS OF THE NATIONAL LABORATORY FOR RESEARCH  
AND DEVELOPMENT IN EARLY CHILDHOOD EDUCATION**

The Centers within the National Laboratory for Early Childhood Education are committed to emphasizing at least two of the following activities: basic research, development and evaluation, training, and dissemination. Decisions about which activities to emphasize were made by each of the Centers in terms of their perceived strengths. The purpose of emphasizing two activities is to assure that within Centers there will be co-ordinated efforts in learning more about young children. In this way, for example, a Center emphasizing basic research activities will integrate this activity with either their training activities or development and evaluation activities.

This commitment to an integration of activities on the part of the individual Centers defining the National Laboratory is, in part, an attempt to overcome the extensive difficulties involved in studying "the whole child". Proponents of the "whole child" approach are critical of laboratory investigations because of the fragmented and often miniscule nature of the variables investigated and the artificial nature of the laboratory situation. In addition these critics argue that laboratory research has little or no bearing, at least immediately, on situations that directly influence the lives of children on a day to day basis. This indictment of narrowness has merit if it implies that basic research scientists are unwilling to see how their work relates to more applied kinds of situations. If the indictment means that the research strategies and the concern for careful control of experimental variables is unpro-

ductive and meaningless, then the argument has considerably less merit.

The basic research scientists' criticism, that global research studies are meaningless because of the lack of adequate controls, is also a poorly conceived argument. Indeed, the scientist who tests his hypothesis in a naturalistic setting often does not know what the salient variables are, because the basic research scientists would not, or could not incorporate these variables in their experiments. The fact remains, nevertheless, that these variables exist. There can be little argument that laboratory experimentation does provide more careful control over variables than more broadly based research in a naturalistic setting. But this does not mean that each research strategy must proceed independently; mutual feedback should provide the means for approaching, meaningfully, the study of the "whole child". It is the position of the National Laboratory that significant advances in understanding young children will derive largely from break-throughs that occur in laboratory experimentation. The National Laboratory is also committed to the premise, that the value of new knowledge is enhanced when it is translated into development programs, which can then be thoroughly tested in the field, refined, and eventually incorporated into early childhood education programs. This commitment requires mutual feedback resulting in further laboratory testing, program modification, and field testing, until all the properties of the behavior are understood. Finally, the National Laboratory is committed to the notion that break-throughs in basic research and program development are of little value, unless they are disseminated to the students being trained in the general area of early childhood education, and who will be able to implement these advances upon completion of their training programs.



This proposal for a National Laboratory in Early Childhood Education represents, in effect, a request for funding a network of Research and Development Centers. These proposed Centers are not, however, independent research and development centers, but rather inclusion in this proposal signifies a commitment to the concept of cooperative relationships with each of the other Centers. Operationally, the concept of inter-center co-operation and integration of activities requires careful definition. The next three sections will examine specific objectives and activities within each of the three broad categories of activities defined for the National Laboratory (basic research, program development, and training).

#### A. Research Activities

Centers, to one degree or another, will examine similar areas of young children's behavior. For example, there is considerable interest in the general problem of attention where visual input of stimuli is the dependent variable. In each instance the investigators at these Centers are concerned with stimulus processing but each is focusing on different categories of stimulus input and each approaches the problem in somewhat different ways and from different theoretical backgrounds. Instead of proceeding in relative isolation, as might be the case if the research and development centers were not under the National Laboratory, it will now be possible for these investigators to meet periodically for the purpose of exchanging ideas, data, and those experiences that are typically only found in the scientist's notebook but rarely in a published paper or a presentation at a professional meeting. Very often, these experiences provide more fruitful data and hypothesis than the eventual sophisticated

published presentations of experimental outcomes. The interchange of ideas, methods, and experience are possible when there exist strong mutual interests and respect as well as encouragement for such interchanges to occur. Social scientists have, for too long, worked in isolation and paid only occasional attention to the work of others; and then in a predominantly critical way. The core of the issue is that Social Scientists and the Educators must start looking for what another person's work contributes to knowledge rather than critical attacks that tend to stultify communication. Constructive criticism is, of course, an essential ingredient of productive interactions. Interactions among scientists, as presently conceived, require maturity, dedication to discovery, and the recognition that no single center, or scientist, can possibly provide all the answers to complex problems.

Another area in which the research scientists associated with individual Centers can cooperate is that of replication of experiments. A serious lack of replication exists in the social sciences which has undoubtedly contributed to the confusing network of findings reported in many areas.

The commitment to the interchange of data and experimental procedures will broaden the subject populations available to each Center, permitting wider generalizability of outcomes. Variations in subject attributes are especially important in the development of broad principles of development. Although it is not known with what frequency individual experiments produce significant findings that are specific to the particular sample, it is a reasonable assumption,

that it occurs sufficiently often to be a problem. More specifically, it can happen that a specific independent variable of interest to the investigator correlates with another variable which, in the particular sample, is widely distributed. The outcome of the experiment may be attributable to the second variable. Upon replication with an entirely different sample, it would be discovered that the manipulated variable (the independent variable) is of little value with respect to influencing the dependent variable. Clearly, if an experiment replicates over two or three extremely different samples, one can conclude that the independent variable is powerful and accounts for most of the variance in the particular behavior examined.

The following groupings of Centers are highly tentative and cannot be finalized until the final proposals are examined. Three Centers, Syracuse University, the University of Chicago, and the University of Arizona are planning intensive thrusts in the area of cognitive development. The Centers at Cornell University, Wayne State University, George Peabody, and San Francisco State are interested in the areas of parent intervention and the effectiveness of such intervention procedures in changing the behavior of a child, especially his cognitive behaviors.

The possibilities for replicating studies among the Centers will naturally require careful co-ordination so that the already over-taxed facilities of some Centers are not overwhelmed with outside demands. The Central Co-ordinating Facility will be responsible for programming replications among the Centers far enough in advance so that each respective center can plan for the forthcoming experimentation.

## B. Program Development Activities

The fundamental objectives of co-ordinating and integrating program activities among the Centers is to provide a sort of catalogue of objectives and implementation procedures that would be available to anyone interested in beginning a preschool education program. Here again, the objective of co-ordinating this kind of information is not for the purpose of differentially evaluating a Center's program because such evaluations are not the purpose of the National Laboratory.

An implicit assumption in this component of the National Laboratory is that no single preschool program can, by itself, accomplish equally well all objectives that might be defined for some idealized preschool program. At least two of the Centers are developing programs that focus primarily on the development of an adequate and healthy self concept. Academic materials are introduced only as they are perceived as being consistent with the child's self concept and where the child perceives such activities as consistent with himself. These specific objectives are accompanied by a description of the procedures for attaining these objectives. Other institutions are concentrating their programs more in the direction of academic and/or cognitive development and, though not disavowing the social-emotional development of the child, are paying somewhat less attention to those components of development.

The dichotomy in the stated objectives of the two groups of Centers reflects a general controversy in early childhood education. Those advocating the importance of academically oriented programs often

criticize the implementation of the other view as mere baby-sitting. The academically oriented people believe that important gains are possible during the preschool years; in fact, many feel that the most significant impacts on cognitive abilities can be made only during the preschool years. They argue that an appropriately designed program does not create emotional problems and, furthermore, reinforces the child's curiosity motivation. Those stressing social-emotional development believe that young children require support in developing into whole human beings without fears or self-doubt. Academic programs, with their implicit pressures, retard self-growth and inhibit learning potential.

It is proposed that those institutions whose objectives are essentially similar, but whose procedures for implementing their objectives differ, should initiate meeting to define areas of mutual interest; that is, comparisons of programs, ideas for program implementation, or evaluations of outcomes. Sometime after that, it would be productive if Centers with opposing objectives were then to sit down and explore areas of similarity as well as defining clearly differences in implementation procedures. This sort of activity may lead to the conclusion that, despite sharp differences in philosophy and stated objectives, these Centers are, nevertheless, actually sharing a large number of specific activities. This possibility is not unlike that which happened when successful therapists of very different theoretical persuasions, were found to overlap in their approaches and behaviors during the actual therapy session.

Despite the theoretical and procedural differences among the



Centers, all Centers share one problem: what modifications are necessary in order that the preschool experience will provide the child with maximum transfer to the primary school situation.

### C. Training Activities

In a very real sense, the long range impact of the National Laboratory will be apparent from the increased numbers of well trained nursery school teachers, child-care workers, and research personnel. Although all of the proposed Centers already provide excellent training programs, the National Laboratory will provide the structure for improvement. For example, it will be possible to provide students with the most current data dealing with cognitive and social-emotional development as well as the results of field studies involving various teaching methods and programs. It may also be possible to arrange exchange programs among the Centers where students can gain experiences not available at their own Center. One feasible arrangement could be the establishment of an internship program in which a student has direct involvement in the activities of another Center.

As might be anticipated from previous discussions, the proposed Centers vary in terms of their stated objectives and the means of implementing their training programs. Some Centers, for example, emphasize research training, others stress the training of preschool teachers, while still others focus on the development of skilled professional workers who can work effectively with parents and neighborhood leaders. Each of these programs will develop individuals whose specific strengths and weaknesses can be ascertained from the stated objectives. Here again, the purpose of the National

Laboratory is not to evaluate training programs, but to delineate the objectives and implementation procedures.

Collaboration of Centers in terms of training provides a unique opportunity to explore several problems related to teacher effectiveness. It is unlikely that Centers will agree on all attributes comprising teacher effectiveness because of differences in objectives. Despite these differences, there might emerge, from systematic discussion, a set of common attributes necessary for all the programs. Once these attributes are defined, it should be possible to develop measures of them and then determine if they, in fact, influence children's behavior in predicted directions. Comparisons between preschool teachers and primary-grade teachers would show, as advocated by some, whether or not the two groups are essentially similar or different. Another possible question concerns the degree to which successful teachers of culturally-deprived children are similar to teachers of middle-class children.

Each of the Centers emphasizing training will meet on a regular basis to explore areas in which collaboration of activities might occur. More specifically, a Center may wish to develop a student exchange program with another Center which can provide unique experiences for their students. Centers may also wish to collaborate in developing assessment procedures for determining the effectiveness of specific student experiences assumed to be crucial to the training program.

In summary, the Centers affiliated with the National Laboratory are committed to emphasizing two of the following three activities: research,

development and evaluation, and training. Beyond the commitment to activities, the Centers are also committed to the concept of intra- and inter-Center communication and collaboration. Finally, the National Laboratory is committed to the dissemination of information not only among Centers but on a nationwide scale.

There is one issue that requires further comment. The National Laboratory is conceived as a network of Centers whose combined efforts will add to our knowledge of all children. Aside from the importance of uncovering basic principles per se, the Laboratory is sensitive to the necessity of improving early childhood education programs for children from all socioeconomic levels of our society. The need for new knowledge and new programs for culturally-deprived children is obvious and is reflected in the programs of many of the proposed Centers. What may be less obvious, however, is a similar need for improved programs for children whose environments already provide quality stimulation. Recently, for example, there has occurred in the Congress a series of meetings to determine the feasibility of establishing required preschool attendance for all children. Quite aside from the cost of such a program, there is a question of what the educational program would accomplish above and beyond what interested and capable parents would accomplish on their own. There is every reason to believe that mandatory preschool education could benefit middle-class children, but the means and the anticipated outcomes are presently obscure.

## **Organization of the Laboratory**

The major objectives of the proposed organizational structure of the National Laboratory include:

1. The establishment of a structure which will nurture Center programs and the integration of activities between Centers.
2. The establishment of a structure which will significantly decrease the lag between confirmed basic knowledge and its translation into practice.
3. The establishment of a structure which will provide the means of disseminating, on a national level, the implications of the work of the individual Centers.
4. The establishment of an open-ended structural organization providing a mechanism for including new Centers whose objectives are consistent with the National Laboratory.
5. The establishment of a structure which will include an advisory committee composed of people representing a broad range of interests and talents.

It would be inappropriate at this point to present a structure for the National Laboratory that was more than illustrative. One such illustration is shown in figure 1.

### **The Director of the National Laboratory**

There will be one Center established with primary responsibility for national dissemination, coordination of inter-Center activities, and which will also serve as a data bank. The director of this Center is also identified as the director of the National Laboratory. In addition to the above

functions, the National Director, and his advisory council will be concerned with identifying possible Centers which could contribute in a unique way to the overall Laboratory.

Recommendations of individuals for the position of Director would be made by the Steering Committee (Center Directors) with the approval of an appropriate committee designated by the funding agency. The Director would be expected to meet with the members of the Steering Committee on a regular basis. These meetings would focus on the achievements, as well as the problems of the Laboratory, with the Steering Committee making recommendations for specific courses of action. At these meetings, recommendations would be formulated concerning proposals for funding new Centers.

The National Center will be independently funded with a part of these funds used to develop inter-Center collaboration.

#### The Steering Committee.

The Steering Committee is comprised of the Center Directors, including the National Director. The Committee will meet at least three times a year for the purpose of reviewing policy and making recommendations concerning future directions.

A subcommittee of the total Committee will be nominated with the primary responsibility of reviewing proposals for additional Centers in the context of the National Laboratory. The subcommittee will convene whenever necessary and make every effort to expedite decisions concerning proposals. In addition to reviewing proposals, the subcommittee will also attempt to generate interest in the National Laboratory among other institutions with programs that would contribute to the overall strength of the Laboratory. It would be expected that the subcommittee's efforts in locating



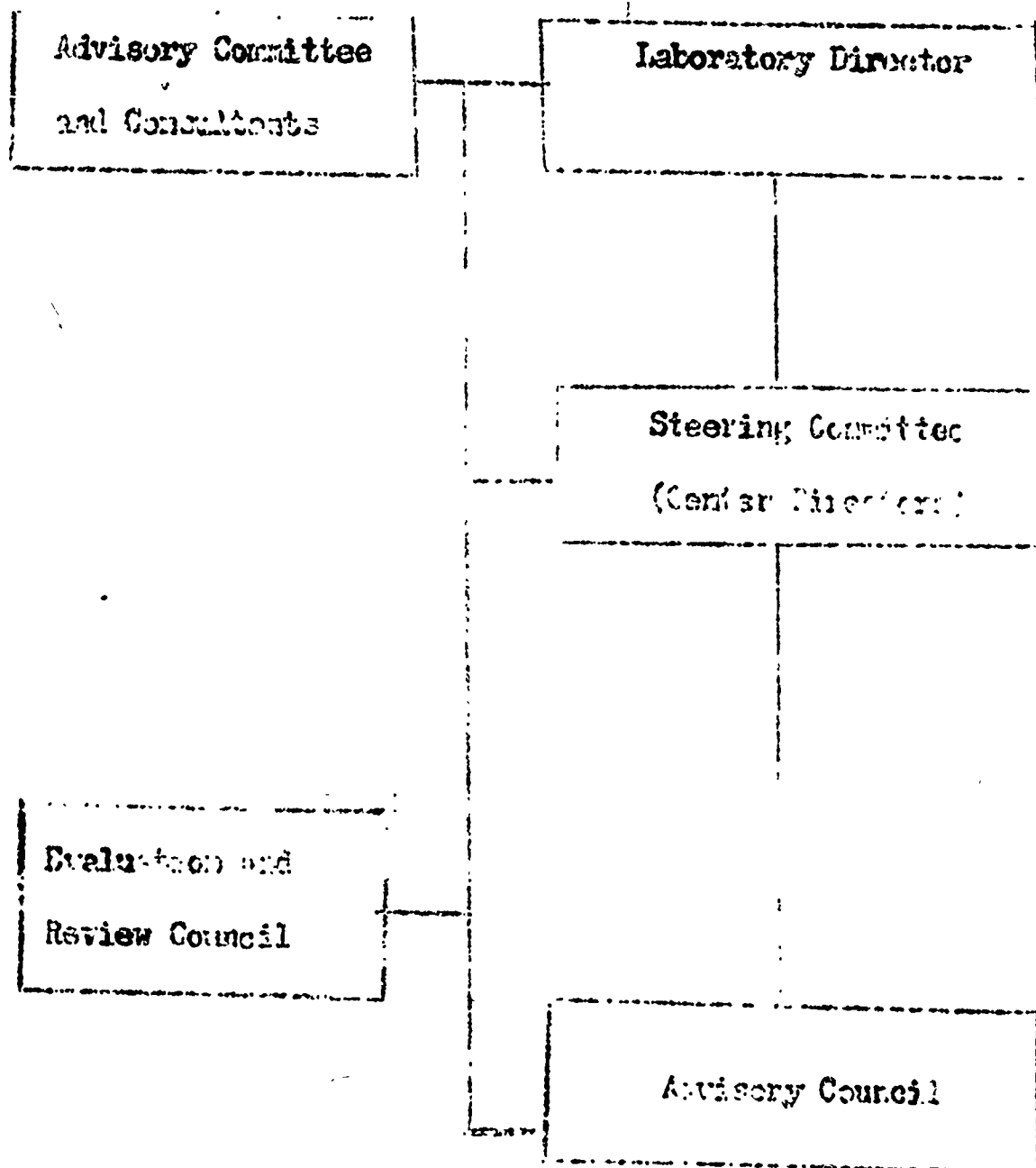


Figure 1. An Illustrative Organizational Structure

possible additional Centers will be supported by recommendations from those interested in strengthening the National Laboratory.

The committee will consist of three members selected by the Board of Trustees. The first member will serve for a two year term, a second member for a two year term, and the third member will serve the full three year term. The length of the term will be decided by drawing lots. For a minimum of three years the committee will be of considerable importance in the development of the Laboratory. The committee will be known as the National Laboratory Steering Committee.

A major purpose of the Education and Labor Commission (ELC) is to insure the maintenance and development of any established Centers and those Centers proposing to join the Laboratory. The committee will be composed of a small number of representatives from each of the agencies contributing to the support of the Laboratory, and the National Director. The Committee will be guided by the recommendations of the representatives of the Steering Committee. Recommendations for funding will be forwarded to the Commissioner for Education.

### The Advisory Council

The Advisory Council will be composed of representatives from a broad cross-section of society. It will be to provide the Laboratory with a broad perspective of the implications and consequences of its activities on American life. The council will include representatives from business and labor leaders, education, art, science, and persons from the general public. It will be the responsibility of the council to provide the Laboratory with a broad perspective of the implications and consequences of its activities on American life.

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